

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Currently Amended) An apparatus for removal of contaminant metal from  
~~purification of an in-flow solution with a contaminant metal~~, comprising:

a first cell frame including a first compartment formed by a closed side and an open side  
to house an anode electrode, the anode electrode being configured as a self-supporting screen  
including at least one connector for attachment to a bus bar situated on a top surface of the first  
cell frame;

a second cell frame including a second compartment formed by a closed side and an open  
side to house a cathode electrode being a mesh screen having at least one connector protruding  
from the mesh screen for coupling with a bus bar on a top surface of the second cell frame, the  
second cell frame including an in-flow port to receive the in-flow solution including the  
contaminant metal and an out-flow port, wherein both the in-flow port and out-flow port are  
placed along an outer perimeter of the second cell frame, the out-flow port positioned above the  
in-flow port and to output a solution without the contaminant metal, ~~the second cell frame further~~  
~~including a second compartment to house a cathode electrode;~~ and

a membrane being positioned ~~between~~ within a collective depth of the first compartment  
of the first cell frame and the second compartment of the second cell frame with the open side of  
the first cell frame facing the open side of the second cell frame, wherein

the membrane, the anode electrode and the cathode electrode ~~[[that]]~~ are (i) sealed within  
the collective depth of the first compartment and the second compartment to prohibit off-gassing  
and (ii) collectively operate to purify the in-flow solution by removal of the contaminant metal  
when the cathode electrode and the anode electrode are energized, ~~wherein a collective depth of~~  
~~the first and second compartments houses at least the membrane;~~ and

a first screen spacer interposed as an interface ~~between the second cell frame and the~~  
~~membrane, the first screen spacer comprising a gasket structure that provides a defined distance~~  
~~between the membrane and the cathode electrode.~~

2. (Previously Presented) The apparatus of claim 1 further comprises a second screen spacer positioned between the first cell frame and the membrane.

3. (Currently Amended) The apparatus of claim 1, wherein a first screen spacer interposed as an interface between the second cell frame and the membrane, the first screen spacer comprising a gasket structure that provides a defined distance between the membrane and the cathode electrode ~~the anode electrode is configured as a self-supporting screen including at least one connector for attachment to a bus bar situated on a top edge of the first cell frame.~~

4. (Previously Presented) The apparatus of claim 3, wherein the cathode electrode is configured as a mesh screen having at least one connector protruding from the mesh screen for coupling with a bus bar on a top edge of the second cell frame.

5. (Original) The apparatus of claim 4, wherein at least one sidewall of the second cell frame is either translucent or transparent.

6-7. (Cancelled).

8. (Original) The apparatus of claim 2 further comprising:  
a first clamping frame situated adjacent to the first cell frame so that the first cell frame is between the first clamping frame and the first screen spacer;  
a second clamping frame situated adjacent to the second cell frame so that the second cell frame is between the second clamping frame and the second screen spacer;  
a plurality of fastening rods inserted through apertures of the first clamping frame and the second clamping frame; and  
a plurality of fastening components each positioned on a corresponding end of one of the plurality of fastening rods.

9. (Original) The apparatus of claim 8, wherein each of the plurality of fastening components is threaded on the corresponding end of the one of the plurality of fastening rods.

10. (Previously Presented) The apparatus of claim 8, wherein the second clamping frame includes a centrally located opening to enable viewing of at least one sidewall of the second cell frame being either translucent or transparent.

11. (Previously Presented) The apparatus of claim 1, wherein the first cell frame further comprises an in-flow port and an out-flow port both placed along a perimeter of the first cell frame.

12. (Cancelled).

13. (Previously Presented) The apparatus of claim 4, wherein the second cell frame includes an end wall that is either transparent or translucent to enable viewing of the anode electrode.

14. (Currently Amended) An apparatus comprising:  
a first cell frame including a first compartment to house an anode electrode and a sidewall being transparent or translucent to view internal components and operations within the first cell frame; and  
a second cell frame including a second compartment to house a cathode electrode,  
wherein a collective depth of the first compartment and the second compartment houses at least one of (i) a first membrane positioned between the anode electrode and the cathode electrode and (ii) a spacer interposed as an interface between the second cell frame and the first membrane, the spacer comprising a gasket structure that provides a defined distance between the membrane and the cathode electrode  
wherein at least the membrane, the anode electrode and the cathode electrode are (i) sealed within the collective depth of the first compartment and the second compartment to prohibit off-gassing and (ii) collectively operate to purify the in-flow solution by removal of a contaminant metal from an in-flow solution received by the second cell frame when the cathode electrode and the anode electrode are energized.

15. (Previously Presented) The apparatus of claim 14, wherein the spacer is a first spacer, the apparatus further comprising a second spacer positioned between the first cell frame and the first membrane.

16. (Cancelled).

17. (Previously Presented) The apparatus of claim 14, wherein a sidewall of at least one of the first cell frame and the second cell frame is either translucent or transparent.

18-20. (Cancelled).

21. (Previously Presented) The apparatus of claim 14, wherein the anode electrode is configured as a self-supporting screen including at least one connector for attachment to a bus bar situated on a top edge of the first cell frame.

22. (Previously Presented) The apparatus of claim 14, wherein the cathode electrode is configured as a mesh screen having at least one connector protruding from the mesh screen for coupling with a bus bar on a top edge of the second cell frame.

23. (Currently Amended) An apparatus for purification of an in-flow solution with a contaminant metal, comprising:

a first cell frame comprises a first compartment to house a cathode electrode;

a second cell frame comprises a second compartment to house an anode electrode, the second cell frame further comprises an in-flow port to receive the in-flow solution including the contaminant metal and an out-flow port, wherein both the in-flow port and out-flow port are placed along an outer perimeter of the second cell frame, the out-flow port positioned above the in-flow port and to output a solution without the contaminant metal;

a membrane being positioned between the anode electrode and the cathode electrode to purify the in-flow solution, wherein a collective depth of the first and second compartments houses and seals at least the membrane along with the anode electrode and the cathode electrode

within the collective depth of the first compartment and the second compartment to prohibit off-gassing; and

a first screen spacer interposed as an interface between the second cell frame and the membrane, the first screen spacer comprising a gasket structure that provides a defined distance between the membrane and the anode electrode.

24. (Previously Presented) The apparatus of claim 23 further comprises a second screen spacer positioned between the first cell frame and the membrane.

25. (Previously Presented) The apparatus of claim 23, wherein the anode electrode is configured as a self-supporting screen including at least one connector for attachment to a bus bar situated on a top edge of the second cell frame.

26. (Previously Presented) The apparatus of claim 25, wherein the cathode electrode is configured as a mesh screen having at least one connector protruding from the mesh screen for coupling with a bus bar on a top edge of the first cell frame.